



Sun Jun 02 14:37:14 2002

IESNA:LM-63-1995

Photopia 1.5.0.20 PHOTOMETRIC REPORT

PROJECT: new AOT shape v02

OPTIONS:

Spawning 1 rays for each reaction.

Writing 250 rays to a DXF file.

Random number generator seed: 8.

Tracing 50 reflections.

Stop tracing ray at 2.0% of initial magnitude.

Tracing 50016 initial lamp rays.

Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
144( 5.3%)	0
109( 4.0%)	1
222( 8.2%)	2
154( 5.7%)	3
154( 5.7%)	4
128( 4.7%)	5
112( 4.2%)	6
96( 3.6%)	7
80( 3.0%)	8
71( 2.7%)	9
62( 2.3%)	10
54( 2.0%)	11
47( 1.8%)	12
38( 1.4%)	13
37( 1.4%)	14
30( 1.1%)	15
27( 1.0%)	16
25( 0.9%)	17
21( 0.8%)	18
17( 0.7%)	19
15( 0.6%)	20
13( 0.5%)	21
12( 0.5%)	22
10( 0.4%)	23
8( 0.3%)	24
8( 0.3%)	25
7( 0.3%)	26
6( 0.2%)	27
5( 0.2%)	28
4( 0.2%)	29
4( 0.2%)	30
3( 0.1%)	31
3( 0.1%)	32
3( 0.1%)	33
2( 0.1%)	34
2( 0.1%)	35
2( 0.1%)	36
1( 0.1%)	37
1( 0.0%)	38
1( 0.0%)	39
1( 0.0%)	40

0( 0.0%)	41
0( 0.0%)	42
0( 0.0%)	43
0( 0.0%)	44
0( 0.0%)	45
0( 0.0%)	46
0( 0.0%)	47
0( 0.0%)	48
0( 0.0%)	49
0( 0.0%)	50
1766( 65.4%)	Total

# LUMENS ABSORBED BY SYSTEM:

Lumens(%)	Layer Name
211( 7.8%)	LAMP-F14T51
25( 1.0%)	LAMP-F14T52
0( 0.0%)	LAMP-F14T5A
234( 8.7%)	REFL-CAV_BOTM
35( 1.3%)	REFL-FAN_BOTEM
145( 5.4%)	REFL-CAV_SIDS
19( 0.7%)	REFL-SHOLDER
224( 8.3%)	REFL-MASK
26( 1.0%)	REFL-FAN_TOP
7( 0.3%)	REFL-CAV_ENDS
930( 34.5%)	Total
Lumens(%)	Material
236( 8.8%)	PHOSGLAS
612( 22.7%)	PERFE960
81( 3.0%)	ALMIRO02
930( 34.5%)	Total

# UNACCOUNTED LUMENS:

reached interreflection limit:	3.28 ( 0.1%)
fell below continuation minimum:	0.00 ( 0.0%)
could not find in/out refractor facet:	0.00 ( 0.0%)
reached try limit for scatter bounce:	0.00 ( 0.0%)
lost elsewhere(i.e. outside distrib):	0.00 ( 0.0%)

Number of Lamps: 2 Lumens per Lamp: 1350  
 Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00  
 Luminaire Width: 1.0000 Length: 4.0000 Height: 0.2065  
 Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	0.000	0.000	0.000	0.000	0.000
5.00	0.000	0.000	0.000	0.000	0.000
10.00	0.000	0.000	0.000	0.000	0.000
15.00	0.000	0.000	0.000	0.000	0.000
20.00	0.000	0.000	0.000	0.000	0.000
25.00	0.000	0.000	0.000	0.000	0.000
30.00	0.000	0.000	0.000	0.000	0.000
35.00	0.000	0.000	0.000	0.000	0.000
40.00	0.000	0.000	0.000	0.000	0.000
45.00	0.000	0.000	1.44	0.000	0.000
50.00	0.000	0.000	0.420	0.290	0.000
55.00	0.000	0.620	0.230	0.250	0.000
60.00	0.000	0.200	0.000	0.000	0.000
65.00	0.000	0.390	0.130	0.110	0.500
70.00	0.000	0.440	1.14	0.370	0.000
75.00	0.000	0.520	0.940	0.000	0.000
80.00	0.680	1.12	3.11	1.11	1.60
85.00	2.42	3.80	20.3	49.8	66.5
90.00	17.0	96.7	155	178	192
95.00	37.9	279	412	448	480
100.00	32.5	299	587	702	724
105.00	26.1	211	617	799	867
110.00	24.0	145	536	785	847
115.00	23.2	108	415	696	838
120.00	17.0	86.0	267	578	670
125.00	17.0	85.6	178	359	507
130.00	17.1	84.0	168	232	296
135.00	14.5	86.4	143	179	202
140.00	12.7	61.0	120	164	196
145.00	9.23	55.5	104	145	187
150.00	9.59	57.4	95.0	117	132
155.00	12.9	32.2	76.6	95.7	96.4
160.00	5.78	33.2	66.7	84.9	64.2
165.00	2.81	19.0	34.3	49.3	78.1
170.00	6.44	5.63	39.0	36.8	52.8
175.00	0.000	5.79	11.7	33.4	7.00
180.00	0.000	0.000	0.000	0.000	0.000

# Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	0.00
5.0	2.5- 7.5	0.00
10.0	7.5- 12.5	0.00
15.0	12.5- 17.5	0.00
20.0	17.5- 22.5	0.00
25.0	22.5- 27.5	0.00
30.0	27.5- 32.5	0.00
35.0	32.5- 37.5	0.00
40.0	37.5- 42.5	0.00
45.0	42.5- 47.5	0.14
50.0	47.5- 52.5	0.07
55.0	52.5- 57.5	0.12
60.0	57.5- 62.5	0.02
65.0	62.5- 67.5	0.11
70.0	67.5- 72.5	0.25
75.0	72.5- 77.5	0.19
80.0	77.5- 82.5	0.87
85.0	82.5- 87.5	14.79
90.0	87.5- 92.5	73.21
95.0	92.5- 97.5	190.72
100.0	97.5-102.5	265.24
105.0	102.5-107.5	274.44
110.0	107.5-112.5	244.92
115.0	112.5-117.5	204.97
120.0	117.5-122.5	151.26
125.0	122.5-127.5	99.30
130.0	127.5-132.5	67.27
135.0	132.5-137.5	50.12
140.0	137.5-142.5	39.64
145.0	142.5-147.5	31.68
150.0	147.5-152.5	23.33
155.0	152.5-157.5	15.00
160.0	157.5-162.5	10.30
165.0	162.5-167.5	5.07
170.0	167.5-172.5	2.64
175.0	172.5-177.5	0.65
180.0	177.5-180.0	0.00

## Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	0	0.0	0.0
0- 40	0	0.0	0.0
0- 60	0	0.0	0.0
0- 90	53	2.0	3.0
90-120	1293	47.9	73.2
90-130	1502	55.6	85.0
90-150	1668	61.8	94.4
90-180	1713	63.5	97.0
0-180	1766	65.4	100.0

Total Luminaire Optical Efficiency = 65.4%

Luminaire Spacing Criterion:

0 deg	90 deg
5.44	5.44

Average Luminaire Luminance (cd/sqmeter):

	0	45	90
0	0.00	0.00	0.00
45	0.00	4.63	0.00
50	0.00	1.44	0.00
55	0.00	0.86	0.00
60	0.00	0.00	0.00
65	0.00	0.59	2.21
70	0.00	5.97	0.00
75	0.00	5.81	0.00
80	8.15	23.68	11.42
85	46.99	203.38	610.92

Coefficients of Utilization - Zonal Cavity Method:

pfc = 0.20

pcc	.8				.7				.5			.3			.1			0
pw	.7	.5	.3	.1	.7	.5	.3	.1	.5	.3	.1	.5	.3	.1	.5	.3	.1	0
RCR																		
0	62	62	62	62	53	53	53	53	37	37	37	21	21	21	7	7	7	1
1	56	53	51	49	48	46	44	42	31	30	29	18	17	17	6	5	5	0
2	51	46	43	39	43	40	37	34	27	25	24	16	15	14	5	5	4	0
3	46	41	36	33	39	35	31	28	24	22	20	14	12	11	4	4	3	0
4	42	36	31	27	36	31	27	24	21	18	17	12	11	10	4	3	3	0
5	39	32	27	23	33	27	23	20	19	16	14	11	9	8	3	3	2	0
6	35	28	23	20	30	24	20	17	17	14	12	9	8	7	3	2	2	0
7	33	25	20	17	28	22	18	15	15	12	10	8	7	6	3	2	2	0
8	30	23	18	15	25	19	15	13	13	11	9	8	6	5	2	2	1	0
9	28	20	16	13	24	17	14	11	12	9	8	7	5	4	2	2	1	0
10	26	18	14	11	22	16	12	10	11	8	7	6	5	4	2	1	1	0